

REMARKS

Claim 1 has been broadened slightly, to recite "at least one" processor.

Art rejections

The art rejections are respectfully traversed.

Since the references are complex, Applicant will confine his remarks to those portions of the references cited by the Examiner, except as otherwise indicated. Applicants make no representation as to the contents of other portions of the references.

The Examiner's other rejections and/or points of argument not addressed would appear to be moot in view of the following. Nevertheless, Applicant reserves the right to respond to those rejections and arguments and to advance additional arguments at a later date.

Claims 1, 10, 19

Claim 1 recites

a touch layer having a top surface and a bottom surface;

a plurality of pressure sensing devices coupled to the bottom surface of the touch layer such that touch pressure applied to the top surface will impart pressure to the pressure sensing devices near the location of the touch pressure; and

a processor coupled to the pressure sensing devices and constructed to calculate locations of at least two points on the top surface being simultaneously touched based on pressure sensing readings from the pressure sensing devices.

Against this recitation, the Examiner cites Gillespie & Tokinka.

The Examiner admits that Gillespie fails to teach or suggest calculation of locations of simultaneous touching as recited in claim 1.

REMARKS

For this proposition, the Examiner cites Tokioka, col. 13, lines 12-44. However, this section of Tokioka specifically states, at lines 15-28 "In use as such keyboard, the operations of depressing two points (two keys) cannot take place strictly simultaneously Stated differently, the present embodiment uses a fact that two points are not entered at the strictly same time." Accordingly, Tokioka explicitly teaches away from the proposition for which the Examiner cites it.

Applicant accordingly respectfully submits that the Examiner has not made a *prima facie* case of obviousness against claim 1.

Independent claims 10 and 19 contain limitations that are analogous to those discussed above with respect to claim 1.

Claims 10 & 21

Claim 10 further recites performing an algorithm to determine locations of the two or more touch points based on comparing the pressure at each of the sensors.

Against this recitation, the Examiner cites Gillespie, col. 9, lines 16-22. Applicant has read this portion of Gillespie and respectfully submits that the Examiner mischaracterizes it. Applicant reads this section of Gillespie as relating to only one point at a time based on a grid location at which a touch is detected. Applicant finds no teaching or suggestion here of any calculation of two or more locations based on comparing pressure at different sensors as recited in claim 10.

Applicant accordingly respectfully submits that the Examiner has not made a *prima facie* case of obviousness against claim 10.

The recitation of new claim 21 is even clearer in this respect because it recites

REMARKS

- each pressure sensing device emits a signal representative of an amount of pressure at that device; and
- the locations of the at least two points are derived simultaneously using geometrically based calculations departing from differences in the amount of pressure detected at distinct ones of the pressure sensors.

Applicant respectfully submits that this distinguishes even more clearly over the reference.

Claim 22

New claim 22 recites material commensurate with the scope of the disclosure, namely that the simultaneous touches are interpreted as musical. The ability to sense simultaneous touches is particularly useful in the case of a musical keyboard, where simultaneous touches can produce a chord. Applicant believes that this recitation distinguishes patentably over the references.

REMARKS

Please charge any fees other than the issue fee to deposit account 14-1270. Please credit any overpayments to the same account.

Applicant respectfully submits that he has answered each issue raised by the Examiner and that the application is accordingly in condition for allowance. Allowance is therefore respectfully requested.

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited this date with the United States Postal Service as first class mail in an envelope addressed to	
Mail Stop Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450	
On _____	(date)
By _____	(signature)

Respectfully submitted,

By *A. F. Barschall*
Anne F. Barschall, Reg. No. 31,089
Tel. no. 914-332-1019
Fax no. 914-332-7719
Date of printing: November 30, 2004